

*Sphaeralcea coccinea*

Scarlet Globemallow

by Kathy Lloyd, Montana Native Plant Society

Scarlet globemallow, a member of the mallow family (Malvaceae) was collected by Meriwether Lewis on July 20, 1806 along the Marias River in present-day Toole County. On the same day he also collected Gardner's saltbush (*Atriplex gardneri*) and greasewood (*Sarcobatus vermiculatus*). Lewis and his small band of men were attempting to follow the Marias River drainage north to determine where the river began. They were hoping to claim land for the United States to the most northern parallel of the Missouri River system. Although Lewis did not succeed in staking a claim for more land, he did make significant discoveries that advanced the knowledge of the flora, fauna, ecology, and soils in the area west of the Mississippi River.

There are currently two specimens of *Sphaeralcea coccinea* (scarlet globemallow) in the Lewis & Clark Herbarium at the Academy of Natural Sciences in Philadelphia. Present day Lewis and Clark scholars and botanists suspect that one of the specimen sheets is not an authentic Lewis and Clark collection. They believe the scarlet globemallow plants on that sheet were grown from seed collected by Thomas Nuttall in 1811. The other specimen sheet contains plants collected by Meriwether Lewis in Montana. The label on the specimen, applied by the botanist Frederick Pursh, says, "A malvaceous Small plant probably a Species of Malope. Plains of Missouri. Jul. 20th 1806." Lewis, always the eager naturalist, took time to write in his journal that day, "the wild liquorice and sunflower are very abundant in the plains and river bottoms, the latter is now in full blume; the silkgrass and sand rush are also common."

Scarlet globemallow occurs in dry grassland prairies and plains from Alberta, Saskatchewan, and Manitoba in Canada, south and eastward to Arizona, New Mexico, Texas, and Mexico. It is rarely found in Iowa and may be extirpated in British Columbia. It is likely that Lewis and Clark saw scarlet globemallow during the summer of 1805 as well, but we will never know for sure. Scarlet globemallow habitat typically receives annual precipitation from 10 to 40 inches on average, and the plant can be found from 3,500 to 9,000 feet elevation.

Scarlet globemallow is usually less than 12 inches tall and frequently trails on the ground. The leaves are grayish-green and are palmately lobed and then lobed again. The flowers are a unique salmon-orange, but can also be light pink to brick red and are clustered in spike-like racemes on the ends of the branches. Since it is in the same family as garden hollyhocks, you will notice a similarity in the flowers. Scarlet globemallow has deep-seated woody roots that help it survive during times of drought. The deep rhizomes also help the plant survive fire and heavy grazing, and since scarlet globemallow reproduces mainly by spreading rhizomes, the reduced competition as a result of disturbance might favor scarlet globemallow.

Scarlet globemallow readily invades disturbed areas, but has been found to do better in native communities than in areas with exotic grasses. As soon as competition becomes

too great, especially from grasses, scarlet globemallow will decrease in numbers, but will proliferate again if there is another disturbance. Scarlet globemallow may have a value in rehabilitating disturbed sites, but will decrease as competition increases. It produces seed only in wet years and germination rates are not high. The species spreads best vegetatively. Scarlet globemallow is an attractive addition to a dryland planting or native landscape and requires little but room.

Scarlet globemallow is commonly eaten by many herbivores and is an important part of the diets of small mammals, pronghorn, deer, sheep, and cattle. The plants are a staple in the diet of black-tailed prairie dogs. Scarlet globemallow contains high amounts of vitamin A, and low amounts of magnesium and calcium. It is considered highly digestible. Scarlet globemallow plants also provide cover for small mammals and birds.

Even though scarlet globemallow is good herbivore food, American Indians seem to have used it mainly as emergency rations by chewing the roots during food shortages. It was used for various medicinal purposes by a number of tribes. Many of the uses involved various preparations of the plant for skin problems such as sores, burns, swellings and bleeding. It was also used to reduce pain. Various Indian nations used the plant ceremonially by rubbing a preparation on the hands to protect them from boiling water.

Scarlet globemallow is an eye-catching part of our prairie ecosystem in Montana. This fragile habitat needs to be protected from disturbance to allow the plant and animal species dependant upon it to thrive. When you visit the prairie, think of how Lewis and Clark must have admired and wondered at the diversity of plant and animal life they encountered.